

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
14 March 2002 (14.03.2002)

PCT

(10) International Publication Number  
**WO 02/21388 A1**

(51) International Patent Classification<sup>7</sup>: **G06F 17/60**

(21) International Application Number: **PCT/US01/27535**

(22) International Filing Date:  
6 September 2001 (06.09.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/230,871 7 September 2000 (07.09.2000) US

(71) Applicant (for all designated States except US): **UNITED STATES POSTAL SERVICE [US/US];** 475 L'Enfant Plaza S.W., Room 6344, Washington, DC 20260-1135 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **WILLOUGHBY, Stuart [US/US];** 2800 Berryland Drive, Oakton, VA 22124 (US).

(74) Agents: **GARRETT, ARTHUR, S. et al.;** Finnegan, Henderson, Farabow, Garrett & Dünner, L.L.P., 1300 I Street N.W., Washington, DC 20005-3315 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

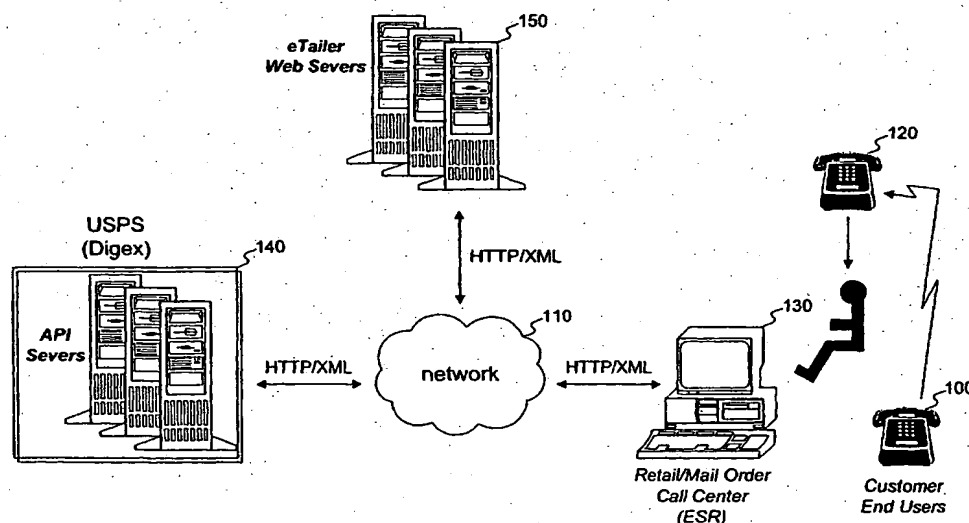
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: METHODS FOR AUTOMATED ACCESS TO SHIPPING SERVICES



(57) Abstract: Systems and methods are disclosed for obtaining shipping services information over a network (110) by a telephone call center (130) receiving orders for merchandise. Instructions are received at the telephone call center (130), which permits the telephone call center (130) to access the shipping services information residing on a server (140). The telephone call center (130) generates a request for the shipping services information for shipment of the merchandise. The telephone call center (130) sends the request over the network (110) to the server (140) for the shipping services information. Thereafter, the server (140) sends the requested shipping services information to the telephone call center (130). The shipping service information may be in the format of a label, which may be attached to a package for shipment of the merchandise.



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**METHODS FOR AUTOMATED ACCESS TO SHIPPING SERVICES**  
**CROSS REFERENCE TO RELATED APPLICATION**

[001] This application claims priority from U.S. Provisional Application Serial No. 60/230,871, filed September 7, 2000, by Stuart Willoughby and titled METHOD FOR AUTOMATED ACCESS TO SHIPPING SERVICES. This application is related to U.S. Provisional Application Ser No. 60/227,903, filed August 25, 2000, by Stuart Willoughby and titled SYSTEMS AND METHODS FOR APPLICATION PROGRAMMING INTERFACES FOR SHIPPING SERVICES, and Copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785), filed August 27, 2001, by Stuart Willoughby and titled SYSTEMS AND METHODS FOR APPLICATION PROGRAMMING INTERFACES FOR SHIPPING SERVICES, the entire disclosure of each is expressly incorporated herein by reference.

**DESCRIPTION OF THE INVENTION**

**Field of the Invention**

[002] This invention relates to obtaining shipping services information over a network by a telephone call center using application programming interfaces ("API's" or "Web Tools API") supplied by the United States Postal Service ("USPS"). A telephone call center receives orders for merchandise. The telephone call center requests shipping services information from a server for the shipment of the merchandise. The telephone call center receives the requested shipping services information from the server, and provides the shipping services information to an operator. The shipping services information may be provided to the operator in the format of a label. The telephone call center may include a facility for printing the label. The label may be attached to the packaged merchandise for shipment.

**Background of the Invention**

[003] In the aforementioned U.S. Provisional Application Serial No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785), methods are disclosed for providing an Internet customer with information relative to shipping services using application programming interfaces ("API's") supplied by the United States Postal Service ("USPS"). The API's are designed to provide access to USPS shipping data and

information over a network. The network is preferably the Internet; however, any type of network known to those skilled in the art may be used.

[004] The shipping services information to be transferred over the network may include postal rates, international and domestic service standards, addressing information, shipping labels, merchandise return labels, delivery confirmation labels, courtesy reply labels, etc. All of this useful shipping information resides on one or more USPS servers.

[005] Mail order retailers that use a telephone call center from which operators access a marketing database server while taking telephone orders from a customer have a need for the information provided by the above described API's but may not have the time for programming resources to integrate them into their existing systems.

[006] It is accordingly an object of an embodiment of the invention to provide access to USPS shipping information to telephone call centers, such as mail order retailers that use a telephone call center to take telephone orders from customers.

[007] This is achieved by providing, to telephone call centers, software that is integrated with the API's. For convenience the software will be referred to as "the shipping assistant." The shipping assistant may be installed on a computer for use by a telephone operator for accessing servers having USPS shipping information. The servers may include, for example, one or more USPS servers. The shipping assistant may be written in any programming language or tool known to those skilled in the art, for example, C, C++, visual basic, HyperText Markup Language ("HTML"), Extensible Markup Language ("XML"), etc.

### **SUMMARY OF THE INVENTION**

[008] In accordance with an embodiment of the invention, systems and methods are disclosed for obtaining shipping services information over a network by a telephone call center receiving orders for merchandise. Instructions are received at the telephone call center, which permits the telephone call center to access the shipping services information residing on a server. The telephone call center generates a request for the shipping services information on the server for shipment of the merchandise. The telephone call center sends the request for the shipping services information

to the server. Thereafter, the telephone call center receives the requested shipping services information from the server. The telephone call center provides the shipping services information to an operator at the telephone call center.

[009] In accordance with another embodiment of the invention, systems and methods are disclosed for obtaining shipping services information over a network by a mail center, wherein the shipping services information is in the format of a label and includes postage thereon. Instructions are received at the mail center for accessing the shipping services information residing on a server; the mail center generates a request at the mail center for the shipping services information; sends the request for the shipping services information to the server over the network; receives at the mail center the requested shipping services information from the server over the network; and provides the shipping services information by the mail center to a customer.

[010] It is to be understood that both the foregoing general description and the following detailed description are exemplary and explanatory only and are not restrictive of the invention, as claimed.

[011] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate one embodiment of the invention and together with the description, serve to explain the principles of the invention.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

[012] Fig. 1 is a schematic illustration of a system incorporating an embodiment of the invention through a telephone call system.

[013] Fig. 2 is a block diagram of a call center system consistent with the present invention.

[014] Fig. 3 is a flowchart showing a method for obtaining shipping services information over a network.

[015] Fig. 4 is a diagram of a user interface for logging into the shipping assistant;

[016] Figs. 5-21 illustrate a series of user interfaces to which a telephone call center operator employed by a telephone retail outlet may

access while taking an order from a customer using the method of the present invention. In particular,

Fig. 5 is a diagram of a user interface for accessing tracking and/or shipping confirmation information;

Fig. 6 is a diagram of a completed user interface for accessing tracking and/or shipping confirmation information;

Fig. 7 is a diagram of a user interface for accessing address checking information;

Fig. 8 is a diagram of a user interface for accessing domestic rates information;

Fig. 9 is a diagram of a user interface for a domestic rates restriction list;

Fig. 10 is a diagram of a user interface for accessing international rates information;

Fig. 11 is a diagram of a user interface for international rates, the user interface having a conditions of mailing list;

Fig. 12 is a diagram of a user interface for accessing service standards information;

Fig. 13 is a diagram of a service standards user interface showing a service standards response.

Fig. 14 is a diagram of a user interface for accessing shipping label information;

Fig. 15 is a diagram of a user interface for e-mailing a delivery confirmation number to a sender and recipient of a mail item;

Fig. 16 is a diagram of a user interface for accessing delivery confirmation information;

Fig. 17 is a diagram of a user interface for accessing merchandise return information;

Fig. 18 is a diagram of a user interface for e-mailing a merchandise return label to a sender of a mail item;

Fig. 19 is a diagram of a user interface for displaying a merchandise return label;

Fig. 20 is a diagram of a user interface for accessing courtesy reply information; and

Fig. 21 is a diagram of a user interface for displaying a courtesy reply label.

[017] Fig. 22 is a schematic illustration of a system incorporating an embodiment of the invention through a back office mail center system.

[018] Fig. 23 is a flowchart showing a method for obtaining shipping services information over a network by a back office mail center system.

### **DESCRIPTION OF THE EMBODIMENTS**

[019] Reference will now be made in detail to the exemplary embodiments of the invention, an example of which is illustrated in the accompanying drawings. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

[020] In accordance with the present invention, and as shown in Fig. 1, a retail/mail order telephone call center is represented by a mail order system 130 attended by an operator 120 accessible by a customer 100 via a telephone. Although only one call center system 130 is shown, it is intended as representative of a plurality of such systems, each with an operator 120 who has access to customers 100 by telephone. Each such call center system 130 is loaded with shipping assistant software supplied on an external storage medium, such as a compact disc ("CD"), floppy disk, etc.

[021] The CD includes software and data, which allows call center system 130 to access the various services provided by the USPS over a network 110, including access to the shipping services information residing on one or more servers 140, such as the USPS Web Tools API server ("Web Tools API server"). USPS Web Tools API server 140 is described in detail in the aforementioned U.S. Provisional Application Ser No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785). The CD also may include initialization routines, which install the shipping assistant software and data with a minimal amount of operator 120 interaction. Thus, the entire contents of the CD provides the ability for a call center system 130 to access the USPS shipping services information without having to write custom software.

[022] Call center system 130 is connected to Web Tools API server 140 via network 110, so that shipping services information corresponding to the user interfaces shown in Figs. 5-21 of the drawings is instantly available to

an operator 120. Network 110 may include, for example, a Local Area Network (LAN), a Wide Area Network (WAN), a wireless network, the Internet, an intranet, and/or any other network or communication medium known to one of ordinary skill in the relevant art. Communications between call center system 130 and Web Tools API server 140 or e-commerce server 150 may take place over network 110 through a secure sockets layer ("SSL") protocol or secure HyperText Transfer Protocol ("S-HTTP").

[023] Operator 120 may provide the shipping services information to an electronic commerce ("e-commerce") entity at an e-commerce server 150. E-commerce entities may include, for example, multi-carriers, electronic retailers, electronic shopping malls, auction houses, or third party vendors that buy in broker services over a network.

[024] Fig. 2 is a block diagram of a call center system 130 consistent with the present invention. Call center system 130 may include a processor 200, which connects over bus 210 to a memory 220, a secondary storage 230, a network interface component 240, and an input/output interface component 250. Memory 220 may include a shipping assistant component 275 and an operating system 280.

[025] Operation of call center system 130 is generally controlled and coordinated by operating system 280. Operating system 280 controls allocation of system resources and performs tasks, such as memory management, process scheduling, networking, and services, among other things.

[026] Secondary storage 230 may include a computer-readable medium, such as a hard disk drive, a compact disc ("CD") drive, or a read/write CD drive. From the CD drive or the read/write CD drive, software and data may be loaded onto the disk drive, which may then be copied into memory 220. Similarly, software and data in memory 220 may be copied onto the hard disk drive, which may then be loaded onto a read/write CD drive.

[027] Network interface component 240 may include hardware and software for sending and receiving data over network 110. Input/Output interface component 250 may include one or more of, for example, a keyboard, a pointing device, a keypad, a display unit, or a printing device.



[028] Fig. 3 is a flowchart showing a method for obtaining shipping services information over a network. An operator 120 receives an order for merchandise from a customer 100. Operator 120 may access a call center system 130 to log into a shipping assistant component 275. Once operator 120 is logged into shipping assistant component 275, she may send to shipping assistant component 275 a request for shipping services information relative to shipment of the merchandise order. As shown in Fig. 3, shipping assistant component 275 receives the request from operator 120 for the shipping services information (stage 310).

[029] Shipping assistant component 275 generates a XML request for the shipping services information (stage 320). Shipping assistant component 275 may make a network connection to Web Tools API Server 140 (stage 330). Next, shipping assistant component 275 sends the XML request to Web Tools API server 140 through network 110 (stage 340). Web Tools API server 140 receives the XML request, generates a XML response to the request, and sends the XML response over the network to call center system 130. The XML response includes the requested shipping services information.

[030] Preferably the requests and responses are implemented in Extensible Markup Language ("XML"); however, they are not limited to language and could be written in any programming language known to those skilled in the art. The format of the XML requests and responses are described in detail in the aforementioned U.S. Provisional Application Ser No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785).

[031] Shipping assistant component 275 receives the XML response (stage 350). Thereafter, shipping assistant component 275 extracts the shipping services information from the XML response (stage 360). Thereafter, shipping assistant component 275 may provide the shipping services information to operator 120 by, for example, displaying the shipping services information to operator 120 through a browser or user interface (stage 370).

[032] The shipping services information may be in the format, for example, of a label. The label may be printed on a printer and applied to a

package. Thereafter, the package may be placed into a mail stream for delivery to the recipient specified in the label. The mail stream may include, for example, the mail stream provided by the USPS.

[033] Operator 120 may provide the shipping services information to the customer 100. Alternatively, operator 120 may provide the shipping services information to an e-commerce entity at an e-commerce server 150.

[034] Fig. 4 is a diagram of a user interface for logging into the shipping assistant. An operator 120 may access a call center system 130 to log into a shipping assistant component 275. Shipping assistant component 275 may retrieve network information that was supplied during installation of the shipping assistant component 275 on call center system 103 for connecting to a Web Tools API server 140. Shipping assistant component 275 may display the network information in a log-in user interface 400 shown in Fig. 4. The network information may be displayed in fields http address 405, http port 410, proxy server 415, and proxy port 420. In addition, shipping assistant component 275 may retrieve operator information that was supplied during installation of the shipping assistant component 275 on call center system 130 for connecting to Web Tools API server 140. Shipping assistant component 275 may display the operator information in fields username 425, output path 435, default printer 440, company name 445, and company e-mail 450. Operator 120 may supply an API password 430. Alternatively, operator 120 may supply information for any of the fields.

[035] Thereafter, operator 120 clicks the continue button 455 to log into shipping assistant component 275. Shipping assistant component 275 retrieves the information from the user interface and verifies whether operator 120 is allowed to access the shipping services information based on the retrieved information. If the operator 120 is not allowed to access the shipping services information (i.e., not a valid user), shipping assistant component 275 sends a message to operator 120 indicating the error condition. Otherwise, shipping assistant component 275 may display to operator 120 one or more of the user interfaces shown in Figs. 5-19.

[036] Fig. 5 is a diagram of a user interface for accessing tracking and/or shipping confirmation information. An operator 120 may receive a telephone call from a customer 100 requesting tracking information about a

merchandise order that has been placed in a mail stream. As shown in Fig. 5, operator 120 may access a track/confirm user interface 500 by clicking tab 505. Customer 100 supplies to operator 120 a tracking id that is associated with the merchandise order. Operator 120 may input the tracking id into a tracking id field 555 and click an add button 560 to add the tracking id to a list of tracking id's for which status information is requested. Operator 120 may then click a submit button 565. Shipping assistant component 275 may display a status of processing of the request in a processing field 570. Thereafter shipping assistant component 275 generates a XML request for the tracking information for the given tracking id's and sends the XML request to a Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information and sends it in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display the tracking information to operator 120 in a response track/confirm information field 550 as shown in Fig. 6. Operator 120 may provide the information to customer 100.

[037] Fig. 7 is a diagram of a user interface for accessing address checking information. An operator 120 may receive a telephone call from a customer 100 for a purchase of merchandise that is to be mailed to a recipient, but customer 100 only knows partial information about the recipient's address. For example, customer 100 does not know the recipient's ZIP code.

[038] Operator 120 may access an address checking user interface 500 by clicking tab 510. Customer 100 may provide to operator 120 a city and state of the recipients address. As shown in Fig. 7, operator 120 may input into user interface 500 the city 625 and state 630 of the recipient's address. Operator 120 may then click a submit button 565. Thereafter shipping assistant component 275 generates a XML request for the ZIP code information and sends the XML request to a Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information and sends it in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display the five digit ZIP code in the ZIP code field 640 and the four digit

ZIP+4 code in the ZIP+4 field 650. Then operator 120 may provide the ZIP code information to the customer 100.

[039] In an alternate example, operator 120 receives a request from a customer 100 to verify a recipient's address for a merchandise order, the request includes the recipients name and address. Operator 120 accesses an address checking user interface 500 by clicking tab 510. As shown in Fig. 7, the operator 120 may input into user interface 500 the recipient's name 605, address 620, city 625, state 630, and ZIP code 640 information. Operator 120 then clicks the submit button 565. Thereafter shipping assistant component 275 generates a XML request based on the information from user interface 500. Next, shipping assistant component 275 sends the XML request to a Web Tools API server 140 through network 110. Web Tools API server 140 determines whether the address information is valid and sends a XML response to the shipping assistant component 275 at call center system 130. Shipping assistant component 275 creates a response, based on the XML response, indicating whether the address is valid. Then, shipping assistant component 275 displays the response to operator 120. Operator 120 may provide the response to customer 100.

[040] Fig. 8 is a diagram of a user interface for accessing domestic rates information. An operator 120 may receive a telephone call from a customer 100 for a purchase of merchandise that is to be mailed to a recipient within the United States. Operator 120 may use information provided by customer 100 to request a domestic rate for shipping the merchandise to the recipient. As shown in Fig. 8, operator 120 may access a domestic rates user interface 500 by clicking tab 515. Operator 120 may input information relevant to shipping the packaged merchandise, such as a shipping service type 705, which specifies the type of delivery service to use in shipping the packaged merchandise. In addition, operator 120 may input the weight of the packaged merchandise in pounds 725 and ounces 730, information about the ZIP code of the sender 710 and recipient 715, and zone 720. Operator 120 may also input information about the size of the packaged merchandise 745, and may then click a submit button 565.

[041] Thereafter, shipping assistant component 275 generates a XML request for the domestic rate information and sends the XML request to

Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information and sends it in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display the domestic rate in a postage rate field 750 as shown in Fig. 9.

[042] Optionally, operator 120 may click a display restrictions button 740 to display restrictions on domestic shipping. For example, the restrictions are shown in Fig. 9 in a restrictions list 760.

[043] Fig. 10 is a diagram of a user interface for accessing international rates information. An operator 120 may receive a telephone call from a customer 100 for a purchase that is to be mailed to a recipient at an international location. Operator 120 may use information provided by customer 100 to request an international rate for shipping the merchandise to the recipient. As shown in Fig. 10, operator 120 may access an international rates user interface 500 by clicking tab 520. Operator 120 inputs information relevant to shipping the packaged merchandise, such as a destination country 805, and a package type 810. The package type 810 specifies the type of package to be shipped. The package type may include, for example, an envelope, package, postcard, etc. In addition, operator 120 may input the weight of the packaged merchandise in pounds 820 and ounces 825. Operator 120 may then click a submit button 565.

[044] Thereafter shipping assistant component 275 generates a XML request for the international rate information and sends the XML request to Web Tools API server 140 through network 110. Tools API server 140 retrieves the requested information and sends it in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display the international rate in a service response field 815.

[045] Optionally, operator 120 may click a display conditions of mailing button 830 to display conditions on mailing the packaged merchandise. For example, the user interface for the conditions on mailing 840 is shown in Fig. 11. As shown in Fig. 11, the operator 120 may click a prohibitions button 845, which displays the prohibitions in a list field 875.

Alternatively, operator 120 may click a restrictions button 850, which displays the restrictions in the list field 875.

[046] Fig. 12 is a diagram of a user interface for accessing service standards information. An operator 120 may receive a telephone call from a customer 100 for merchandise that is to be mailed to a recipient via express mail. Customer 100 desires to know a time in which to expect delivery of the merchandise. Operator 120 may use information provided by customer 100 to request a service standard for shipping the merchandise to the recipient.

[047] As shown in Fig. 12, operator 120 may access a service standards user interface 500 by clicking tab 525. Operator 120 may input information relevant to a commitment on the delivery of the merchandise, such as a shipping service type 900, which specifies the type of delivery service to use in shipping the packaged merchandise. In addition, operator 120 may input information about the ZIP code of the sender 910 and the recipient 920. Operator 120 may then click a submit button 565.

[048] Thereafter, shipping assistant component 275 generates a XML request for the shipping standards information and sends the XML request to Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information and sends it in a XML response to the shipping assistant at the call center system 130. As shown in Fig. 13 shipping assistant component 275 may display the service standard for shipping during the weekday in field 940 and the standard for shipping during the weekend in field 950. Operator 120 may then provide the service standards to customer 100.

[049] Fig. 14 is a diagram of a user interface for accessing shipping label information. An operator 120 may receive a telephone call from a customer 100 for a shipping label, which is to be attached to a package containing merchandise that is to be mailed to a recipient. Operator 120 may access a shipping label user interface 500 by clicking tab 530 to request a shipping label, for example, a delivery confirmation label. Operator 120 receives information from the customer 100 about the sender and/or recipient of the merchandise, shipping service type, and information about the package, such as the weight of the packaged merchandise.

[050] As shown in Fig. 14, operator 120 inputs information about the sender in the from fields 1005 and information about the recipient in the to fields 1010. In addition, operator 120 supplies the weight of the package 1045, and a service type 1060. Operator 120 may select an image type 1055, label date 1050, and check an e-mail field 1070, which indicates whether to e-mail a delivery confirmation number to the sender and recipient of the merchandise. The delivery confirmation number provides for tracking the merchandise in a mail stream. Operator 120 may then click a submit button 565. Thereafter shipping assistant component 275 generates a XML request for the delivery confirmation label and sends the XML request to Web Tools API server 140 through network 110.

[051] Web Tools API server 140 retrieves the requested information, generates the requested delivery confirmation label with a corresponding delivery confirmation number, and sends the delivery confirmation label and delivery confirmation number in a XML response to shipping assistant component 275 at call center system 130.

[052] Shipping assistant component 275 may display the delivery confirmation number in the response field 1065 and provide the delivery confirmation label to operator 120. Then, operator 120 may provide the delivery confirmation label and delivery confirmation number to customer 100. The delivery confirmation label may be provided to customer 100 using any known delivery method. For example, the delivery confirmation label may be faxed to customer 100, e-mailed to customer 100, or printed at the telephone call center and mailed to customer 100. Alternatively, the delivery confirmation label may be sent to an e-commerce entity at an e-commerce server 150 for shipping the merchandise to the recipient. The delivery confirmation label may be attached to a package, along with any required postage, if any, and the package may be placed into the mail stream for delivery to the recipient specified on the delivery confirmation label.

[053] If operator 120 checked the e-mail field 1070, the user interface for e-mail delivery confirmation number shown in Fig. 15 may be displayed to operator 120. Operator 120 may enter the name 1086 and e-mail address 1087 of the sender and name 1089 and e-mail address 1090 of the recipient and click an "OK" button 1092 to submit the information to

shipping assistant component 275. Thereafter, shipping assistant component 275 sends an e-mail notification to the sender and recipient of the merchandise notifying both of the delivery confirmation number. The delivery confirmation number may be used to track the delivery status of the merchandise.

[054] One example of a delivery confirmation label is shown in Fig. 16. As shown in Fig. 16, a delivery confirmation label 1094 may include a delivery confirmation bar code 1095, a delivery confirmation number 1096, the name and address of a sender 1097, and the name and address of a recipient 1098. The delivery confirmation label 1094 may include a location for the placement of postage 1099 or optionally, an indication of pre-paid postage.

[055] The delivery confirmation barcode allows a sender and a recipient of a Priority Mail® or a Package Services mail item to obtain delivery confirmation information about the package's delivery based on the delivery confirmation number. As the package travels through a mail stream such as that provided by the USPS, the delivery confirmation barcode is scanned and the scanned information is stored in one or more tracking databases. Upon delivery of the package, the delivery confirmation barcode is scanned again, and the scanned information is stored in one or more tracking databases.

[056] Fig. 17 is a diagram of a user interface for accessing merchandise return information. The merchandise return user interface 500 may be used to request a merchandise return label from Web Tools API server 140. The merchandise return label may be attached to a package, and the package may be placed into the mail stream for return of merchandise to the recipient specified on the merchandise return label. For purpose of this example, the recipient is a retailer and may include an e-commerce entity at an e-commerce server 150. An operator 120 may receive a telephone call from a customer 100 for a merchandise return label to return merchandise to a recipient. Operator 120 may access a merchandise return user interface 500 by clicking tab 535, to request a merchandise return label for returning the merchandise to the recipient.

[057] Operator 120 receives information from the customer 100 and enters it into the fields of the user interface 500. The information may include,



for example, information about the sender 1105 and the recipient 1115, shipping service type 1150, and information about the package, such as the weight of the packaged merchandise 1132 and a return authorization number 1145. The return authorization number may include, for example, a return materials authorization ("RMA"). In addition, the information may include a mailing acknowledgement identification number 1142. The RMA and mailing acknowledgement identification number are described in detail in the aforementioned U.S. Provisional Application Serial No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785). Further, operator 120 may click a delivery confirmation checkbox 1130 to include a delivery confirmation barcode in the merchandise return label, and may click an e-mail merchandise return label checkbox 1135 to specify whether the merchandise return label is to be emailed to the sender.

[058] Operator 120 may then click a submit button 565. Thereafter shipping assistant component 275 generates a XML request for the merchandise return label and sends the XML request to Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information, generates the requested merchandise return label and sends the merchandise return label in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display a delivery confirmation number in the response field 1165 and information regarding the cost of insurance 1162 for the merchandise. In addition, shipping assistant component 275 may display the shipping label to operator 120 as shown in Fig. 19. Operator 120 may send the merchandise return label 1170 to customer 100 using any known delivery method. For example, the merchandise return label may be faxed to customer 100, e-mailed to customer 100, or printed at the telephone call center and mailed to customer 100. The merchandise return label may then be applied to a package containing the merchandise. The package may then be placed into the mail stream for delivery to the recipient. The merchandise return label 1170 is described in detail in the aforementioned U.S. Provisional Application Ser No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785).

[059] If operator 120 checked the e-mail merchandise return label checkbox 1135, the e-mail merchandise return label user interface 500 shown in Fig. 18 may be displayed to operator 120. Operator 120 may enter the name 1176 and e-mail address 1177 of the sender and name 1179 and e-mail address 1180 of the retailer, and click an "OK" button 1185 to submit the information to shipping assistant component 275. Shipping assistant component 275 sends the merchandise return label to the sender via e-mail and sends an e-mail notification to the retailer of the merchandise notifying the retailer that a merchandise return label was sent to the sender.

[060] Fig. 20 is a diagram of a user interface for accessing courtesy reply information. The courtesy reply user interface 500 may be used to request a courtesy reply label from Web Tools API server 140. The courtesy reply label may be attached to a package, postage may be applied to the package, and the package may be placed into the mail stream for return of the merchandise to the recipient specified on the courtesy reply label. For purpose of this example, the recipient is a retailer. The courtesy reply label is described in detail in the aforementioned U.S. Provisional Application Ser No. 60/227,903 and copending U.S. Patent Application Serial No. (Atty Docket No. 08049.0785).

[061] An operator 120 may receive a telephone request for a courtesy reply label from a customer 100 who desires to return merchandise to a retailer. As shown in Fig. 18, operator 120 may access a courtesy reply user interface 500 by clicking tab 540. Operator 120 inputs information about the sender in the from fields 1205 of the courtesy reply user interface 500 and information about the retailer in the to fields 1250. Operator 120 may select an image type 1285, and provide any customer comments or an RMA number 1245. Operator 120 may then click a submit button 565. Thereafter shipping assistant component 275 generates a XML request for the courtesy reply label and sends the XML request to Web Tools API server 140 through network 110. Web Tools API server 140 retrieves the requested information, generates the requested courtesy reply label, and sends the courtesy reply label in a XML response to shipping assistant component 275 at call center system 130. Shipping assistant component 275 may display the courtesy reply label to operator 120 as shown in Fig. 19. Operator 120 may provide

the courtesy reply label to customer 100 using any known delivery method. For example, the courtesy reply label may be faxed to customer 100, e-mailed to customer 100, or printed at the telephone call center and mailed to customer 100.

[062] One example of a courtesy reply label is shown in Fig. 21. As shown in Fig. 21, a courtesy reply label 1290 may include an RMA number 1292, the name and address of a sender 1293, and the name and address of a retailer 1294. The courtesy reply label 1290 may include a location for the placement of postage 1295. The courtesy reply label 1290 may also include a delivery confirmation barcode.

[063] Fig. 22 is a schematic illustration of a system incorporating an embodiment of the invention through a back office mail center system. In accordance with the present invention. As shown in Fig. 22, a back office mail center system 130 may be connected to one or more customer systems 120 and a Web Tools API server 140 through a network 110. Back office mail center system 130 is loaded with shipping assistant component 275 software supplied on an external storage medium, such as a compact disc ("CD"), floppy disk, etc.

[064] Back office mail center system 130 is connected to Web Tools API server 140 via network 110, so that it may access shipping services information corresponding to the user interfaces shown in Figs. 5-21, and described in detail above. Network 110 may include, for example, a Local Area Network (LAN), a Wide Area Network (WAN), a wireless network, the Internet, an intranet, and/or any other network or communication medium known to one of ordinary skill in the relevant art. Communications between back office mail center system 130, customer systems 120, and Web Tools API server 140, may take place over network 110 through a secure sockets layer ("SSL") protocol or secure HyperText Transfer Protocol ("S-HTTP"). Back office mail center system 130 includes the system configuration shown in Fig. 2, and described above in the description of Fig. 2.

[065] Fig. 23 is a flowchart showing a method for obtaining shipping services information over a network by a back office mail center system. A back office mail center system 130 receives a request from a customer 120 for shipping services information (stage 1310). Back office mail center system

130 calls a shipping assistant component 275 to process the request. Shipping assistant component 275 generates a XML request for the shipping services information (stage 1320). Shipping assistant component 275 may make a network connection to Web Tools API Server 140 (stage 1330). Next, shipping assistant component 275 sends the XML request to Web Tools API server 140 through network 110 (stage 1340). Web Tools API server 140 receives the XML request, generates a XML response to the request, and sends the XML response over the network to back office mail center system 130. The XML response includes the requested shipping services information.

[066] Shipping assistant component 275 receives the XML response (stage 1350). Thereafter, shipping assistant component 275 extracts the shipping services information from the XML response (stage 1360). Thereafter, shipping assistant component 275 may provide the shipping services information to customer 120 by, for example, sending the shipping services information to customer 120 through network 110 (stage 1370). Alternatively, the shipping services information may be provided to customer 120 using any other known delivery method, such as fax, e-mail, physical (regular) mail, etc.

[067] The shipping services information may be in the format, for example, of a label. The label may be printed on a printer and applied to a package. Thereafter, the package may be placed into a mail stream for delivery to the recipient specified in the label.

[068] Other embodiments of the invention will be apparent to those skilled in the art from consideration of the specification and practice of the invention disclosed herein. It is intended that the specification and examples be considered as exemplary only, with a true scope and spirit of the invention being indicated by the following claims.

WHAT IS CLAIMED IS:

1. A method for obtaining shipping services information over a network by a call center receiving orders for merchandise, comprising:
  - receiving instructions at the call center to access the shipping services information residing on a server;
  - generating a request at the call center for the shipping services information for shipment of the merchandise;
  - sending the request for the shipping services information to the server over the network;
  - receiving at the call center the requested shipping services information from the server over the network; and
  - providing the shipping services information by the call center to an operator for shipment of the merchandise.
2. The method of claim 1 wherein the shipping services information is provided in a format to produce a label.
3. The method of claim 2 wherein the label includes merchandise return information thereon.
4. The method of claim 3 wherein the merchandise return information includes at least one of addressing information, barcode information, and return authorization number.
5. The method of claim 3 wherein the merchandise return information includes an indication of pre-paid postage.
6. The method of claim 2 wherein the label includes shipping information thereon.
7. The method of claim 6 wherein the shipping information includes at least one of addressing information, barcode information, and an indication of pre-paid postage.
8. The method of claim 1 wherein the call center is a retail telephone call center.
9. A system for obtaining shipping services information over a network by a call center receiving orders for merchandise, comprising:
  - means for receiving instructions at the call center to generate requests to access the shipping services information residing on a server;

means for generating a request at the call center for the shipping services information for shipment of the merchandise;

means for sending the request for the shipping services information to the server;

means for receiving at the call center the requested the shipping services information from the server; and

means for providing the shipping services information by the call center to an operator for shipment of the merchandise.

10. The system of claim 9 further comprising means for providing the shipping services information in the format of a label.

11. The system of claim 9 further comprising means for printing the shipping services information.

12. A method for obtaining shipping services information over a network by a call center receiving orders for merchandise, wherein the shipping services information includes a label, comprising:

receiving instructions at the call center to access the shipping services information residing on a server;

generating a request at the call center for the shipping services information for shipment of the merchandise;

sending the request for the shipping services information to the server over the network;

receiving at the call center the requested shipping services information from the server over the network; and

providing the label by the call center to an operator for shipment of the merchandise.

13. The method of claim 12 wherein the label includes merchandise return information thereon.

14. The method of claim 13 wherein the merchandise return information includes at least one of addressing information, barcode information, and return authorization number.

15. The method of claim 13 wherein the merchandise return information includes an indication of pre-paid postage.

16. The method of claim 12 wherein the label includes shipping information thereon.

17. The method of claim 16 wherein the shipping information includes at least one of addressing information, barcode information, and an indication of pre-paid postage.

18. The method of claim 12 wherein the call center is a retail telephone call center.

19. A system for providing shipping services information over a network to a call center receiving orders for merchandise, wherein the shipping services information includes a label, comprising:

means for receiving instructions at the call center to access the shipping services information residing on a server;

means for generating a request at the call center for the shipping services information for shipment of the merchandise;

means for sending the request for the shipping services information to the server over the network;

means for receiving at the call center the requested shipping services information from the server over the network; and

means for providing the label by the call center to an operator for shipment of the merchandise.

20. The system of claim 19 further comprising means for providing the shipping services information in the format of a label.

21. The system of claim 19 further comprising means for printing the label.

22. A method for obtaining shipping services information over a network by a mail center, wherein the shipping services information is in the format of a label and includes postage thereon, comprising:

receiving instructions at the mail center to access the shipping services information residing on a server;

generating a request at the mail center for the shipping services information;

sending the request for the shipping services information to the server over the network;

receiving at the mail center the requested shipping services information from the server over the network; and

providing the shipping services information by the mail center to a customer.

23. The method of claim 22 wherein the label includes merchandise return information thereon.

24. The method of claim 23 wherein the merchandise return information includes at least one of addressing information, barcode information, and return authorization number.

25. The method of claim 22 wherein the label includes shipping information thereon.

26. The method of claim 25 wherein the shipping information includes at least one of addressing information, and barcode information.

27. The method of claim 22 wherein the mail center is a back office mail center.

28. A system for obtaining shipping services information over a network by a mail center, wherein the shipping services information is in the format of a label and includes postage thereon, comprising:

means for receiving instructions at the mail center to access the shipping services information residing on a server;

means for generating a request at the mail center for the shipping services information;

means for sending the request for the shipping services information to the server over the network;

means for receiving at the mail center the requested shipping services information from the server over the network; and

means for providing the shipping services information by the mail center to a customer.



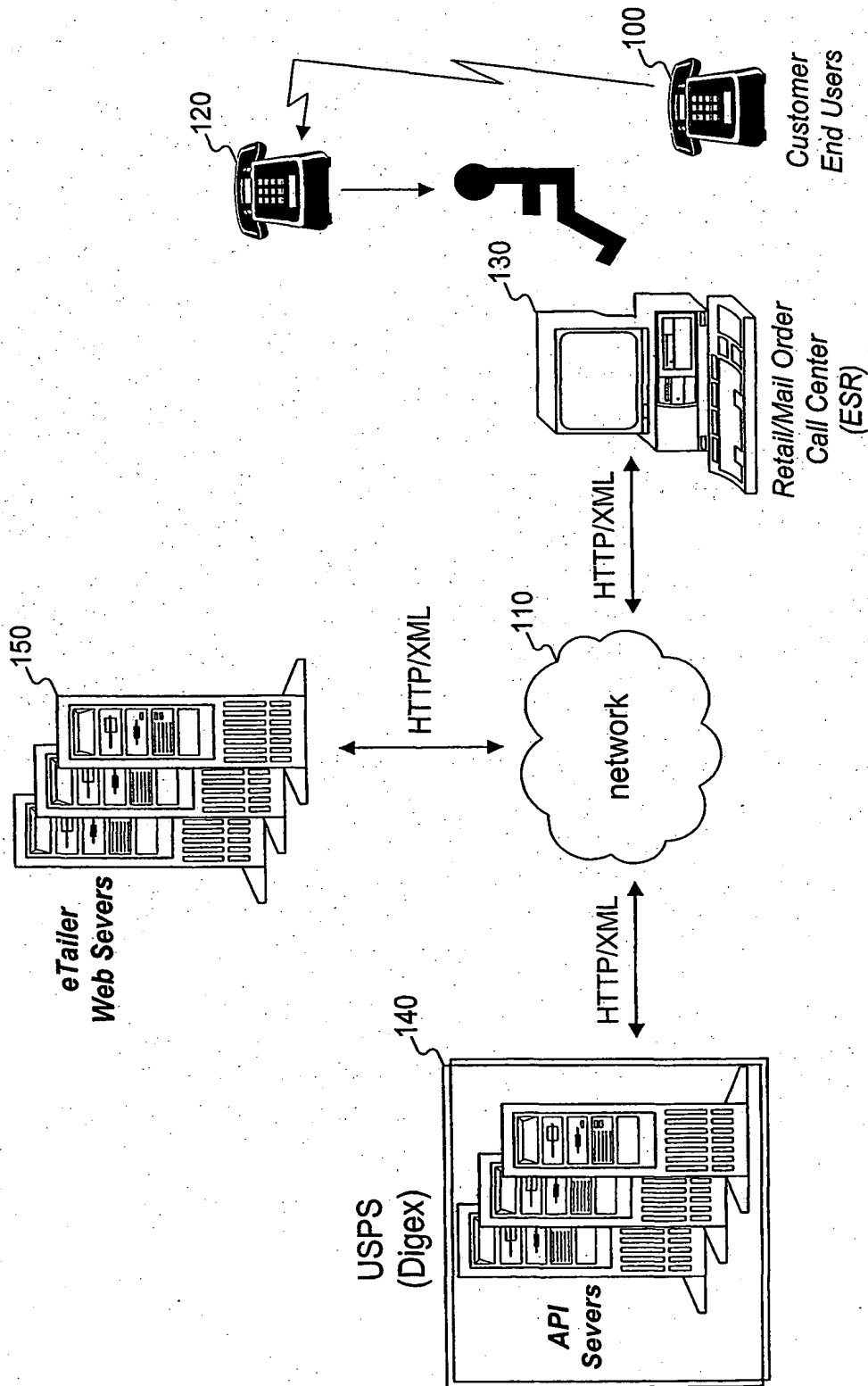
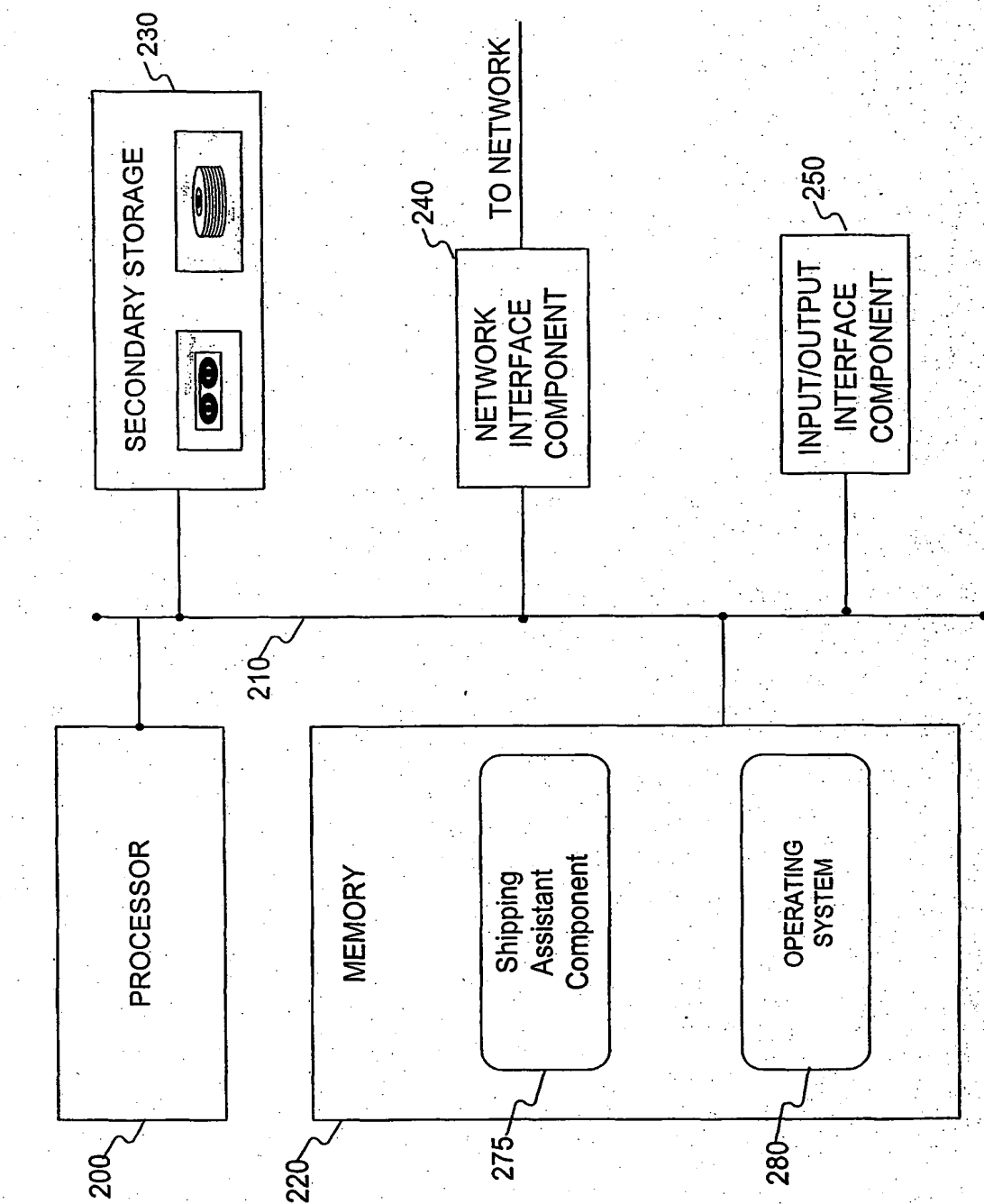


Fig. 1



**Fig. 2**

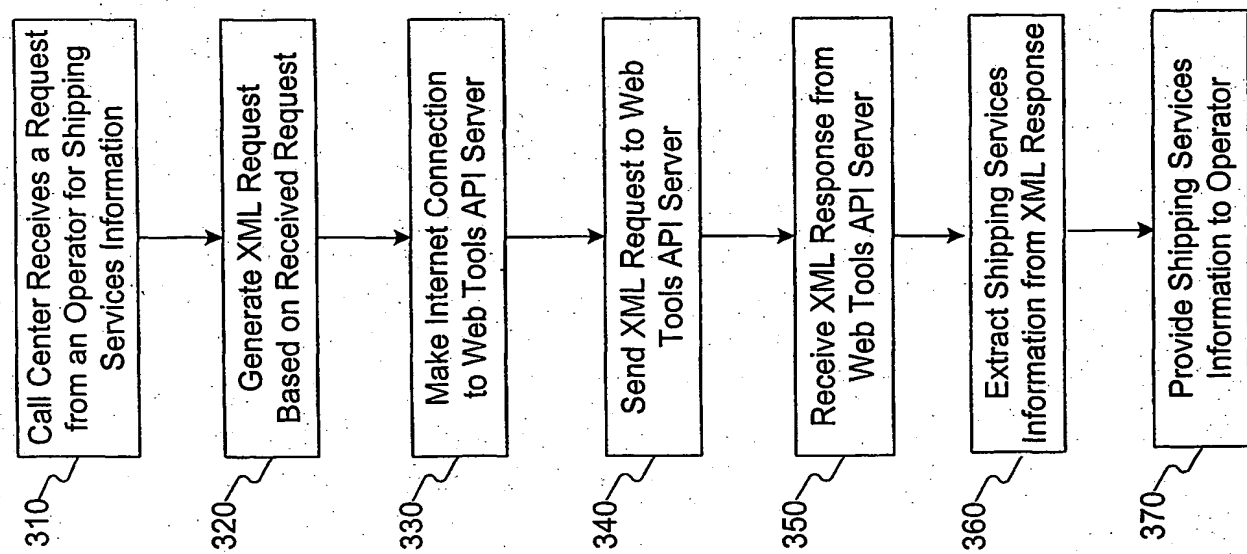


Fig. 3

4/23

Processing Information

### Shipping Assistant Processing Information

Http Address	production.shippingapis.com
Http Port	80
Proxy Server	56.50.200
Proxy Port	8080

Username	455USPS06615
API Password	139XX35RF359
Output Path	C:\PROGRAM FILES\SHIPPINGASST V1.2\Out
Default Printer	HP LaserJet 5L (PCL)
Company Name	XYZ Corporation
Company E-mail	XYZ@retailer.com

Sender address used in e-mail messages (Merchandise, Return and Delivery Confirmation tabs only).

Continue

Fig. 4

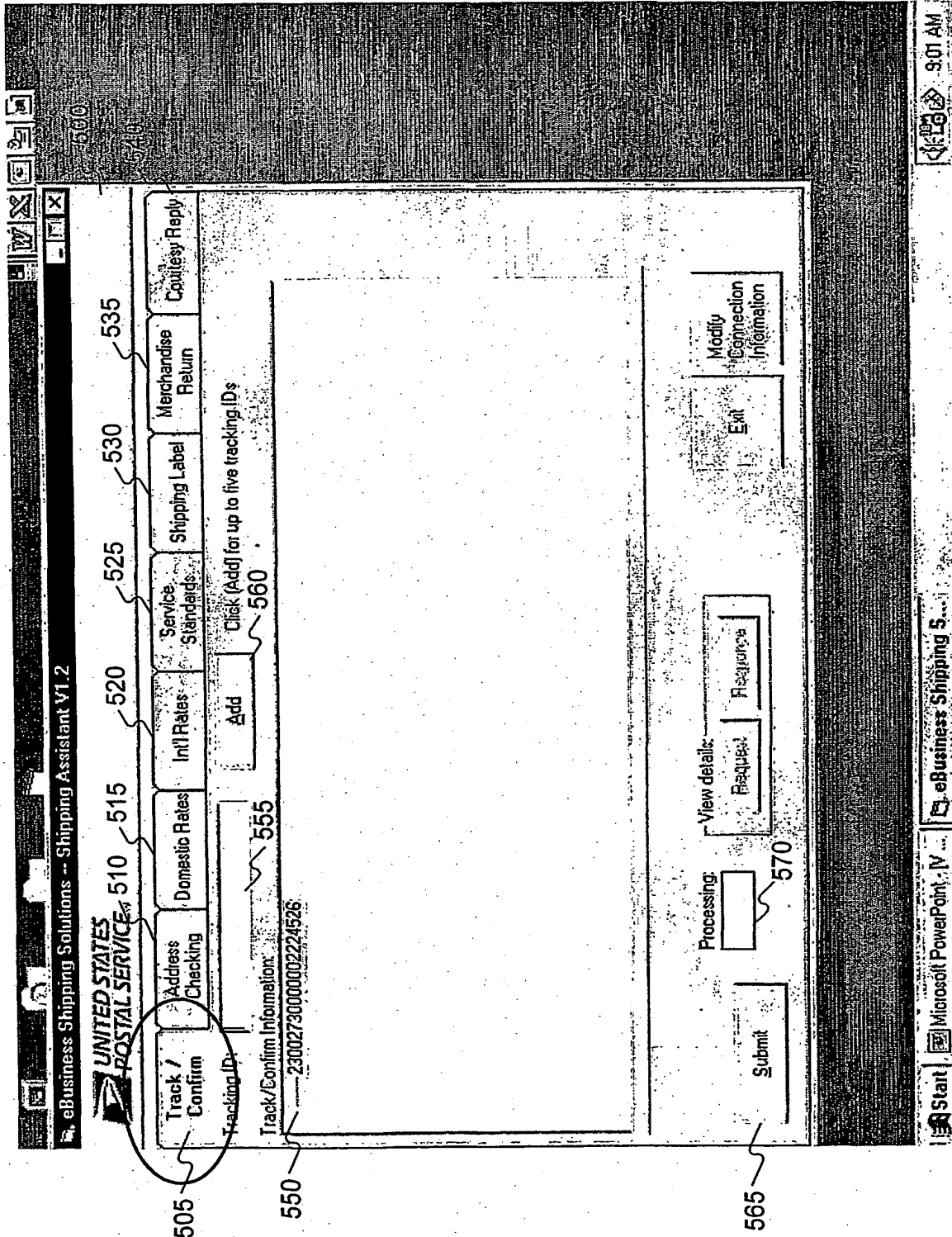


Fig. 5

The screenshot displays the 'eBusiness Shipping Assistant V1.2' window. At the top, a navigation bar includes icons for various functions and a status bar showing 'Start', 'Microsoft PowerPoint - IV...', 'eBusiness Shipping S...', and the time '9:01 AM'. The main interface is divided into several sections:

- Navigation Bar (Top):** Contains icons for 'Track / Confirm', 'Address Checking', 'Domestic Rates', 'Int'l Rates', 'Service Standards', 'Shipping Label', 'Merchandise Return', and 'Courtesy Reply'. Below these are numerical labels 510, 515, 520, 525, 530, and 535.
- Tracking ID Section (Left):** Labeled '505' and '550'. It includes a 'Track / Confirm' button, a 'Tracking ID' field with the value '2300273000000224526', and a 'Track/Confirm Information' section.
- Tracking Details (Center):** A large text area containing the message: 'Your item was delivered at 9:56 am on January 22 in ENGLEWOOD NJ 07631 to N Kalantani. January 18 11:31 am ACCEPT OR PICKUP PROVIDENCE RI 02906'. Below this is a 'Submit' button labeled '565'.
- Processing Section (Right):** Labeled '565' and '570'. It includes a 'Processing' status, a 'Complete' button, a 'View details' link, and a 'Request' button. Below these is a 'Response' button.
- Exit and Information (Bottom Right):** Includes an 'Exit' button and a 'Mobility Connection Information' link.

Fig 6

505

515

520

525

530

535

540

545

550

555

560

565

570

575

580

585

590

595

600

605

610

615

620

625

630

635

640

645

650

655

660

665

670

675

680

685

690

695

700

705

710

715

720

725

730

735

740

745

750

755

760

765

770

775

780

785

790

795

800

805

810

815

820

825

830

835

840

845

850

855

860

865

870

875

880

885

890

895

900

905

910

915

920

925

930

935

940

945

950

955

960

965

970

975

980

985

990

995

1000

1005

1010

1015

1020

1025

1030

1035

1040

1045

1050

1055

1060

1065

1070

1075

1080

1085

1090

1095

1100

1105

1110

1115

1120

1125

1130

1135

1140

1145

1150

1155

1160

1165

1170

1175

1180

1185

1190

1195

1200

1205

1210

1215

1220

1225

1230

1235

1240

1245

1250

1255

1260

1265

1270

1275

1280

1285

1290

1295

1300

1305

1310

1315

1320

1325

1330

1335

1340

1345

1350

1355

1360

1365

1370

1375

1380

1385

1390

1395

1400

1405

1410

1415

1420

1425

1430

1435

1440

1445

1450

1455

1460

1465

1470

1475

1480

1485

1490

1495

1500

1505

1510

1515

1520

1525

1530

1535

1540

1545

1550

1555

1560

1565

1570

1575

1580

1585

1590

1595

1600

1605

1610

1615

1620

1625

1630

1635

1640

1645

1650

1655

1660

1665

1670

1675

1680

1685

1690

1695

1700

1705

1710

1715

1720

1725

1730

1735

1740

1745

1750

1755

1760

1765

1770

1775

1780

1785

1790

1795

1800

1805

1810

1815

1820

1825

1830

1835

1840

1845

1850

1855

1860

1865

1870

1875

1880

1885

1890

1895

1900

1905

1910

1915

1920

1925

1930

1935

1940

1945

1950

1955

1960

1965

1970

1975

1980

1985

1990

1995

2000

2005

2010

2015

2020

2025

2030

2035

2040

2045

2050

2055

2060

2065

2070

2075

2080

2085

2090

2095

2100

2105

2110

2115

2120

2125

2130

2135

2140

2145

2150

2155

2160

2165

2170

2175

2180

2185

2190

2195

2200

2205

2210

2215

2220

2225

2230

2235

2240

2245

2250

2255

2260

2265

2270

2275

2280

2285

2290

2295

2300

2305

2310

2315

2320

2325

2330

2335

2340

2345

2350

2355

2360

2365

2370

2375

2380

2385

2390

2395

2400

2405

2410

2415

2420

2425

2430

2435

2440

2445

2450

2455

2460

2465

2470

2475

2480

2485

2490

2495

2500

2505

2510

2515

2520

2525

2530

2535

2540

2545

2550

2555

2560

2565

2570

2575

2580

2585

2590

2595

2600

2605

2610

2615

2620

2625

2630

2635

2640

2645

2650

2655

2660

2665

2670

2675

2680

2685

2690

2695

2700

2705

2710

2715

2720

2725

2730

2735

2740

2745

2750

2755

2760

2765

2770

2775

2780

2785

2790

2795

2800

2805

2810

2815

2820

2825

2830

2835

2840

2845

2850

2855

2860

2865

2870

2875

2880

2885

2890

2895

2900

2905

2910

2915

2920

2925

2930

2935

2940

2945

2950

2955

2960

2965

2970

2975

2980

2985

2990

2995

3000

3005

3010

3015

3020

3025

3030

3035

3040

3045

3050

3055

3060

3065

3070

3075

3080

3085

3090

3095

3100

3105

3110

3115

3120

3125

3130

3135

3140

3145

3150

3155

3160

3165

3170

3175

3180

3185

3190

3195

3200

3205

3210

3215

3220

3225

3230

3235

3240

3245

3250

3255

3260

3265

3270

3275

3280

3285

3290

3295

3300

3305

3310

3315

3320

3325

3330

3335

3340

3345

3350

3355

3360

3365

3370

3375

3380

3385

3390

3395

3400

3405

3410

3415

3420

3425

3430

3435

3440

3445

3450

3455

3460

3465

3470

3475

3480

3485

3490

3495

3500

3505

3510

3515

3520

3525

3530

3535

3540

3545

3550

3555

3560

3565

3570

3575

3580

3585

3590

3595

3600

3605

3610

3615

3620

3625

3630

3635

3640

3645

3650

3655

3660

3665

3670

3675

3680

3685

3690

3695

3700

3705

3710

3715

3720

3725

3730

3735

3740

3745

3750

3755

3760

3765

3770

3775

3780

3785

3790

3795

3800

3805

3810

3815

3820

3825

3830

3835

3840

3845

3850

3855

3860

3865

3870

3875

3880

3885

3890

3895

3900

3905

3910

3915

3920

3925

3930

3935

3940

3945

3950

3955

3960

3965

3970

3975

3980

3985

3990

3995

4000

4005

4010

4015

4020

4025

4030

4035

4040

4045

4050

4055

4060

4065

4070

4075

4080

4085

4090

4095

4100

4105

4110

4115

4120

4125

4130

4135

4140

4145

4150

4155

4160

4165

4170

4175

4180

4185

4190

4195

4200

4205

4210

4215

4220

4225

4230

4235

4240

4245

4250

4255

4260

4265

4270

4275

4280

4285

4290

4295

4300

4305

4310

4315

4320

4325

4330

4335

4340

4345

4350

4355

4360

4365

4370

4375

4380

4385

4390

4395

4400

4405

4410

4415

4420

4425

4430

4435

4440

4445

4450

4455

4460

4465

4470

4475

4480

4485

4490

4495

4500

4505

4510

4515

4520

4525

4530

4535

4540

4545

4550

4555

4560

4565

4570

4575

4580

4585

4590

4595

4600

4605

4610

4615

4620

4625

4630

4635

4640

4645

4650

4655

4660

4665

4670

4675

4680

4685

4690

4695

4700

4705

4710

4715

4720

4725

4730

4735

4740

4745

4750

4755

4760

4765

4770

4775

4780

4785

4790

4795

4800

4805

4810

4815

4820

4825

4830

4835

4840

4845

4850

4855

4860

4865

4870

4875

4880

4885

4890

4895

4900

4905

4910

4915

4920

4925

4930

4935

4940

4945

4950

4955

4960

4965

4970

4975

4980

4985

4990

4995

5000

5005

5010

5015

5020

5025

5030

5035

5040

5045

5050

5055

5060

5065

5070

5075

5080

5085

5090

5095

5100

5105

5110

5115

5120

5125

5130

5135

5140

5145

5150

5155

5160

5165

5170

5175

5180

5185

5190

5195

5200

5205

5210

5215

5220

5225

5230

5235

5240

5245

5250

5255

5260

5265

5270

5275

5280

5285

5290

5295

5300

5305

5310

5315

5320

5325

5330

5335

5340

5345

5350

5355

5360

5365

5370

5375

5380

5385

5390

5395

5400

5405

5410

5415

5420

5425

5430

5435

5440

5445

5450

5455

5460

5465

5470

5475

5480

5485

5490

5495

5500

5505

5510

5515

5520

5525

5530

5535

5540

5545

5550

5555

5560

5565

5570

5575

5580

5585

5590

5595

5600

5605

5610

5615

5620

5625

5630

5635

5640

5645

5650

5655

5660

5665

5670

5675

5680

5685

5690

5695

5700

5705

5710

5715

5720

5725

5730

5735

5740

5745

5750

5755

5760

5765

5770

5775

5780

5785

5790

5795

5800

5805

5810

5815

5820

5825

5830

5835

5840

5845

5850

5855

5860

5865

5870

5875

5880

5885

5890

5895

5900

5905

5910

5915

5920

5925

5930

5935

5940

5945

5950

5955

5960

5965

5970

5975

5980

5985

5990

5995

6000

6005

6010

6015

6020

6025

6030

6035

6040

6045

6050

6055

6060

6065

6070

6075

6080

6085

6090

6095

6100

6105

6110

6115

6120

6125

6130

6135

6140

6145

6150

6155

6160

6165

6170

6175

6180

6185

6190

6195

6200

6205

6210

6215

6220

6225

6230

6235

6240

6245

6250

6255

6260

6265

6270

6275

6280

6285

6290

6295

6300

6305

6310

6315

6320

6325

6330

6335

6340

6345

6350

6355

6360

6365

6370

6375

6380

6385

6390

6395

6400

6405

6410

6415

6420

6425

6430

6435

6440

6445

6450

6455

6460

6465

6470

6475

6480

6485

6490

6495

6500

6505

6510

6515

6520

6525

6530

653

505

705

715

720

565

510

515

520

525

530

535

540

740

745

750

730

725

710

700

690

680

670

660

650

640

630

620

610

600

590

580

570

560

550

540

530

520

510

500

490

480

470

460

450

440

430

420

410

400

390

380

370

360

350

340

330

320

310

300

290

280

270

260

250

240

230

220

210

200

190

180

170

160

150

140

130

120

110

100

90

80

70

60

50

40

30

20

10

0

UNITED STATES  
POSTAL SERVICE

eBusiness Shipping Solutions -- Shipping Assistant V1.2

Track / Confirm

Address Checking

Domestic Rates

Intl Rates

Service Standards

Shipping Label

Merchandise Return

Courtesy Reply

Service Type:

Priority Mail

Express Mail

Parcel Post

Bound Printed Matter

Library Mail

Media Mail

Weight (5 to 70 lbs)

Pounds

Ounces

Machinable

Flat Rate Envelope?

Postage Rate

Processing

Submit

View details

Request

Response

Modify Connection Information

Exit

Start

Microsoft PowerPoint - IV...

eBusiness Shipping S...

9:05 AM

Fig. 8



**UNITED STATES POSTAL SERVICES**

510 515 520 525 530 535 540

Track / Confirm Address Checking Domestic Rates Int'l Rates Service Standards Shipping Label Merchandise Return Courtesy Reply

Service Type: Priority Mail

Weight (5 to 70 lbs): Pounds 3 Ounces 0

Machinable: ☒ Yes ☐ No

ZIP Codes or Zone Info (Required): Origin 22124 Dest 09021 Zone 3

Postage Rate 5.15

Processing Complete

Submit

**APO/FPO Restrictions List**

760

B1. Form 2976-A is required for all mail weighing 16 ounces or more, with exceptions noted below. In addition, mailers must properly complete required customs documentation when mailing any potentially dutiable mail addressed to an APO or FPO regardless of weight. The following are exceptions to the requirement for customs documentation on non-dutiable mail that weighs 16 ounces or more:

Known mailers are exempt from providing customs documentation on non-dutiable letters, and printed matter weighing 16 ounces or more. (A known mailer is anyone who legally applies a permit imprint to a mailpiece. Mail with meter postage is not considered to be from a known mailer.)

All federal, state, and local government agencies are exempt from providing customs documentation on mail addressed to an APO or FPO, except for those APOs/FPOs to which restriction B2 applies. Prepaid mail from military contractors is exempt, providing the mailpiece is endorsed "Contents for Official Use - Exempt from Customs Requirements."

B1. Form 2976 or 2976-A is required. Articles are liable for customs duty and/or purchase tax unless they are bona fide gifts intended for use by

Close

Start Microsoft PowerPoint... eBusiness Shipping Solu... NetWare Broadcast Message... APO/FPO Restriction... 9:09 AM

Fig 9

505

805

810

815

565

570

535

530

525

520

515

510

500

UNITED STATES POSTAL SERVICE

Track / Confirm

Address Checking

Domestic Rates

Int'l Rates

Service Standards

Shipping Label

Merchandise Return

Courtesy Reply

Destination Country

Australia

Package Type

Package

Envelope

Postcards or Aerogrammes

Matter for the Blind

Weight

Pounds

2

820

825

Display Conditions of Mailing

Processing

View details

Refresh

Submit

Modify Connection Information

Exit

Start

Microsoft PowerPoint IV

eBusiness Shipping S...

NetWare Broadcast Message

9:13 AM

Fig. 10

11/23

505 Track / Confirm 515 Address Checking 520 Domestic Rates 525 Int'l Rates 530 Service Standards 535 Shipping Label 540 Merchandise Return 545 Courtesy Reply

805 Destination Country: Australia 810 Package Type: Package

815 Service Response(s):

Postage	\$28.00
Commitment	2-3 Days
Description	Global Express Mail (EMS)
Dimensions	Max length 36", max. length plus girth 79"
Max Weight	44

845 ID 3

Postage	\$3.00
Commitment	3-5 Days
Description	Global Priority Mail - Flatrate Envelope (large)
Dimensions	9-1/2" x 12-1/2"

565 Submit 570 Complete 575 View details: Request

840 Conditions of Mailing

845 Prohibitions: Coins; bank notes; currency notes (paper money); securities of any kind payable to bearer; traveler's checks; platinum, gold, and silver (manufactured or not); precious stones; jewelry; and other valuable articles are prohibited in registered and unregistered letter packages, small parcels, air and surface parcels, and Express Mail International Service shipments that are mailed to Australia.

850 Restrictions: Fruit cactons (used or new); Goods bearing the name "Anzac"; Goods produced wholly or partly in prisons or by convict labor.

855 Observations: Radioactive materials; Registered philatelic articles with fictitious addresses; Seditious literature; Silencers for firearms; Used bedding.

860 Custom Forms: Registered philatelic articles with fictitious addresses.

865 Express Mail: Registered philatelic articles with fictitious addresses.

870 Close

875 Start Microsoft PowerPoint eBusiness Shipping Solutions NetWare Broadcast Message Conditions of Mailing 9:15 AM

Fig. 11

505

510

515

520

525

530

535

900

910

920

940

950

565

570

9:15 AM

Fig. 12

**505** (Menu Bar)

**510** (Service Type: Express Mail)

**515** (Origin ZIP: 22124)

**520** (Destination ZIP: 30303)

**525** (Service Standards)

**530** (Shipping Label)

**535** (Merchandise Return)

**540** (Courtesy Reply)

**900** (Track / Confirm)

**910** (Address Checking)

**920** (Domestic Rates)

**930** (Intl Rates)

**940** (Mon-Fri Commitments: 12:00 PM)

**950** (Sat/Sun Commitments: 3:00 PM)

**965** (Submit)


**970** (Processing Complete)

**980** (View details: Request, Response)

**990** (Exit, Modify Connection Information)

**Taskbar:** Start, Microsoft PowerPoint - IV, eBusiness Shipping S..., NetWare Broadcast Message, 9:16 AM

Fig. 13



**UNITED STATES  
POSTAL SERVICE**

eBusiness Shipping Solutions -- Shipping Assistant V1.2

505

Track / Confirm

510

Address Checking

515

Domestic Rates

520

Int'l Rates

525

Service Standards

530

Shipping Label

535

Merchandise Return

540

Courtesy Reply

From: 1005

Name: XYZ Corporation

Firm:

Street/Apt: 1234 eTeller Ave.

City: Los Angeles

State: CA ZIP: 90052 ZIP+4: 3234

Name: L Esthopper

Firm:

Street/Apt: 6417 WESTCHESTER ST

City: Houston

State: TX ZIP: 77005 ZIP+4: 3761

☐ Test / Sample ☐ Delivery Confirmation-only Label ☒ Delivery Confirmation w/ Address

☐ Save form fields and response to output path?

Response: Delivery Confirmation #: 1065

Weight in Ounces: 40 Label Date: Today

Service Type: Priority Mail Image Type: PDF

☒ E-Mail the Delivery Confirmation Number?

ProSelect this to send an e-mail message containing the DC number to a recipient.

Request

Response

Display Image

Exit

Submit

Fig. 14

**Fig. 15**

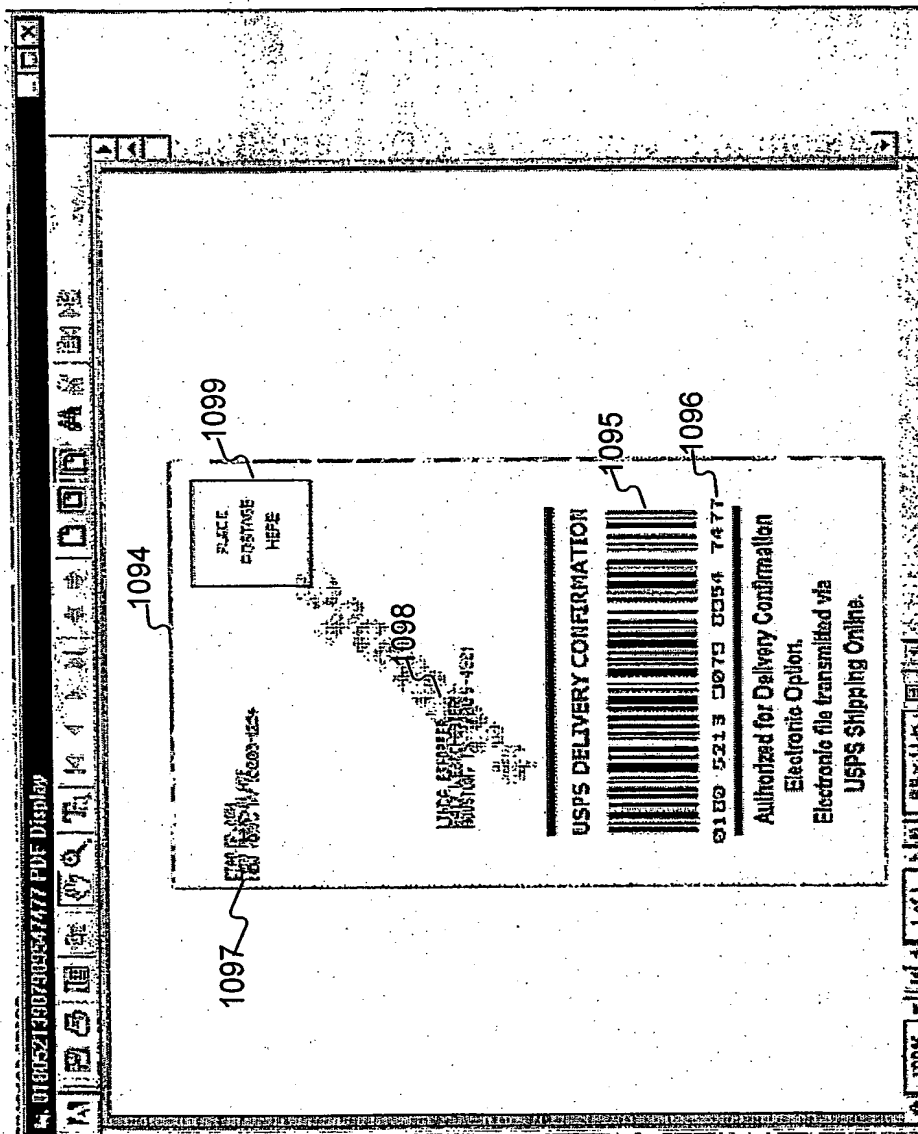


Fig. 16



505 510 515 520 525 530 535 540 500

**eBusiness Shipping Solutions -- Shipping Assistant V1.2**

**UNITED STATES POSTAL SERVICE**

Track / Confirm Address Checking Domestic Rates Intl Rates Service Standards Shipping Label Merchandise Return Courtesy Reply

Customer Info: 1105  
Name: L. Eshopper  
Address: 6417 WESTCHESTER ST  
City: HOUSTON State: TX ZIP: 77005  
Clear Use Checked Address

Postage Due Unit Info: 1135  
PO Box: PO Box 9998  
City: New York State: NY ZIP: 10005 ZIP-4: 1234

Service Type: Priority Mail  
Label Image Type: PDF Test / Sample Label

Save form fields and response to output path?

1150 1152 565 570

Retailer's Name: XYZ eBooks  
Retailer's Address: 1000 eTailer Ave.  
Permit Info: Number: 1234512345  
Issuing City: New York State: NY ZIP: 10003

Delivery Confirmation  
E-mail Merchandise Return Label  
Insurance \$: 500 Pounds: 2 Ounces: 80  
Mailing Ack Package ID: 1234567  
RMA #: 987654321 RMA Barcode? 1147

Response: Postal Zone: Insurance Cost \$: 160  
Delivery Confirmation #: 165

Select this to save data in file MRYyyyymmdd.csv in Output Path. Output Path can be changed by clicking the Modify Connection Information button on this form.

Submit Request for Shipping Display Image Exit

Modify Connection Information

Fig. 17

**E-Mail Merchandise Return Label**

Please enter the following sender and recipient information.  
Click on the OK button when you are finished.

**From:** XYZ eBooks  
XYZ@etailer.com

**To:** Enter the sender's e-mail address here [name@domain.com]  
IL Eshopper  
eshopper@yahoo.com

**City:** New York  
**State:** NY **ZIP:** 10005 **ZIP+4:** 1234

**Service Type:** Priority Mail  
**Label Image Type:** PDF ☐ Test / Sample Label

☐ Save form fields and response to output path?

**Processing:**

**Insurance \$:** 500 **Package Pounds:** 2 **Dounces:** 5

**Mailing Ack Package ID:** 1234567 **RMA #:** 987654321 **RMA Barcode?** ☐

**Response:**  **Postal Zone:**  **Insurance Cost \$:**

**Delivery Confirmation #:**

**Sender's Name:** XYZ eBooks  
**Sender's Address:** 1000 eTailer Ave.  
**Sender's City:** New York **Sender's State:** NY **Sender's ZIP:** 10003

**Service Standards:** **Shipping Label:** **Merchandise Return:** **Courtesy Reply:**

**OK** **Cancel**

Fig. 18

**FROM:**  
L. ESHOPPER  
8417 WESTCHESTER ST  
HOUSTON, TX 77005

**POSTAGE DUE COMPUTED BY ACCEPTANCE POST OFFICE**

**POSTAGE**  
MERCHANDISE RETURN FEE  
DELIVERY CONFIRMATION FEE  
INSURANCE FEE  
TOTAL POSTAGE AND FEES DUE \$ 13.00

**INSURANCE DESIRED BY PERMIT HOLDER FOR \$ 500.00 (VALUE)**

**NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES**

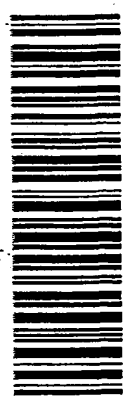
**PRIORITY MAIL**

987654321

**MERCHANDISE RETURN LABEL**  
PERMIT NO. 1234512345 NEW YORK NY 10003  
XYZ EBOOKS 10000 ETAILER AVE.

**POSTAGE DUE UNIT**  
US POSTAL SERVICE  
PO BOX 9988  
NEW YORK NY 10005-1234

**USPS DELIVERY CONFIRMATION**



8580 5213 5079 4756 3442

**Customer Mailing Instructions**

100% 1 of 1 B5 x 11 in.

**FROM: L. ESHOPPER**  
8417 WESTCHESTER ST

**FROM: L. ESHOPPER**  
8417 WESTCHESTER ST

**Start** Microsoft PowerPoint - V ...

**eBusiness Shipping S...** NetWare Broadcast Message

9:25 AM

Fig. 19

eBusiness Shipping Solutions -- Shipping Assistant V1.2

**UNITED STATES**  
**POSTAL SERVICE**

505
510
515
520
525
530
535
540
500

Track / Confirm
Address Checking
Domestic Rates
Int'l Rates
Service Standards
Shipping Label
Merchandise Return
**Courtesy Reply**

From:
To:

**Name** L. Eshopper

**Firm**

**St/Apt**

**Address** 6417 WESTCHESTER ST

**City** HOUSTON

**State** TX ZIP 77005 ZIP+4 3761

**Clear** **Use Checked Address**

**Name**

**Firm** eTailor

**St/Apt**

**Address** 500 Madison Ave

**City** New York

**State** NY ZIP 10005 ZIP+4 1234

**Comment or RMA #:** 987654321 **Image Type:** PDF

**Processing:**

**Submit**

**View details:**

**Request** **Response**

**Display Image**

**Exit**

**Modify Connection Information**

Fig. 20

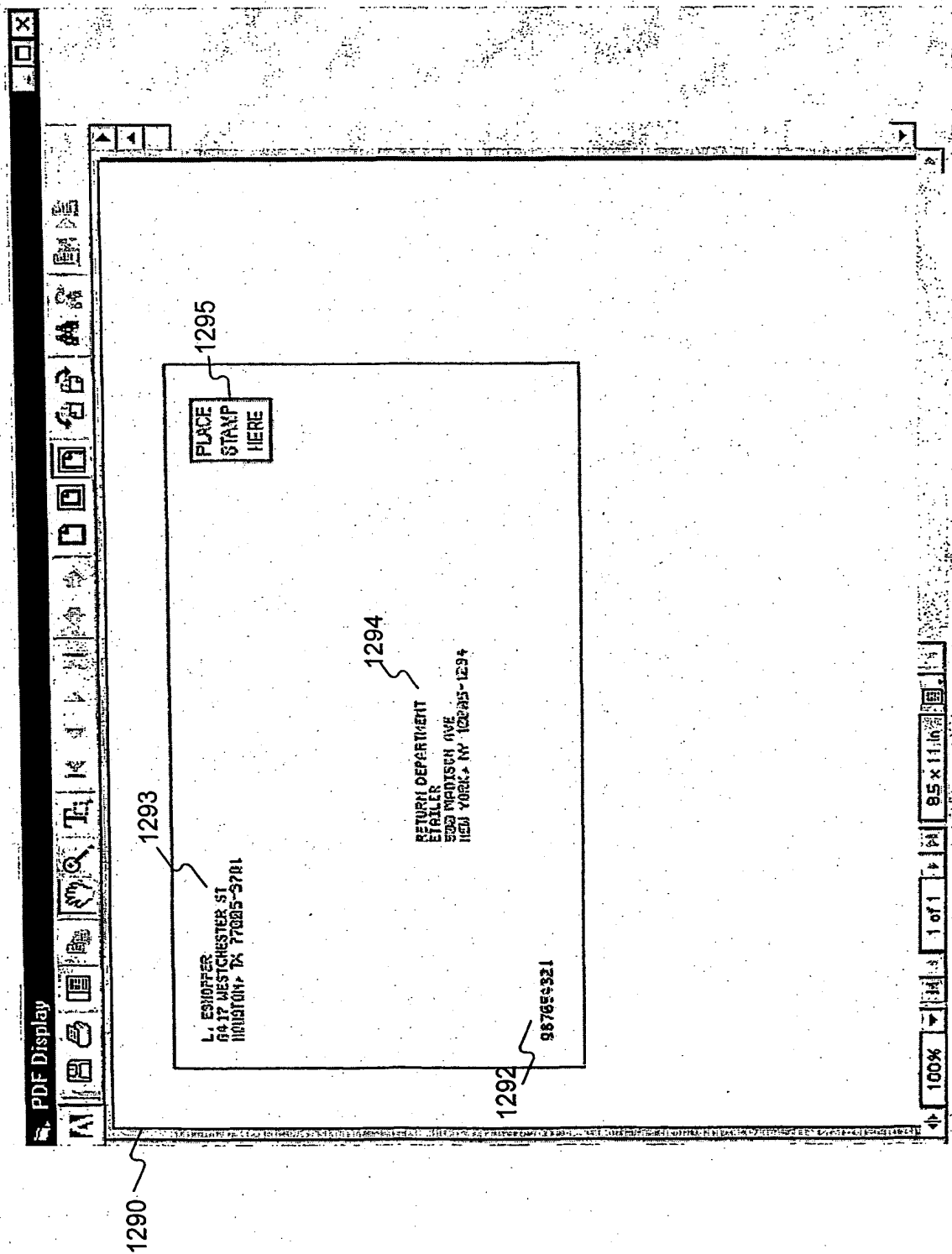


Fig. 21

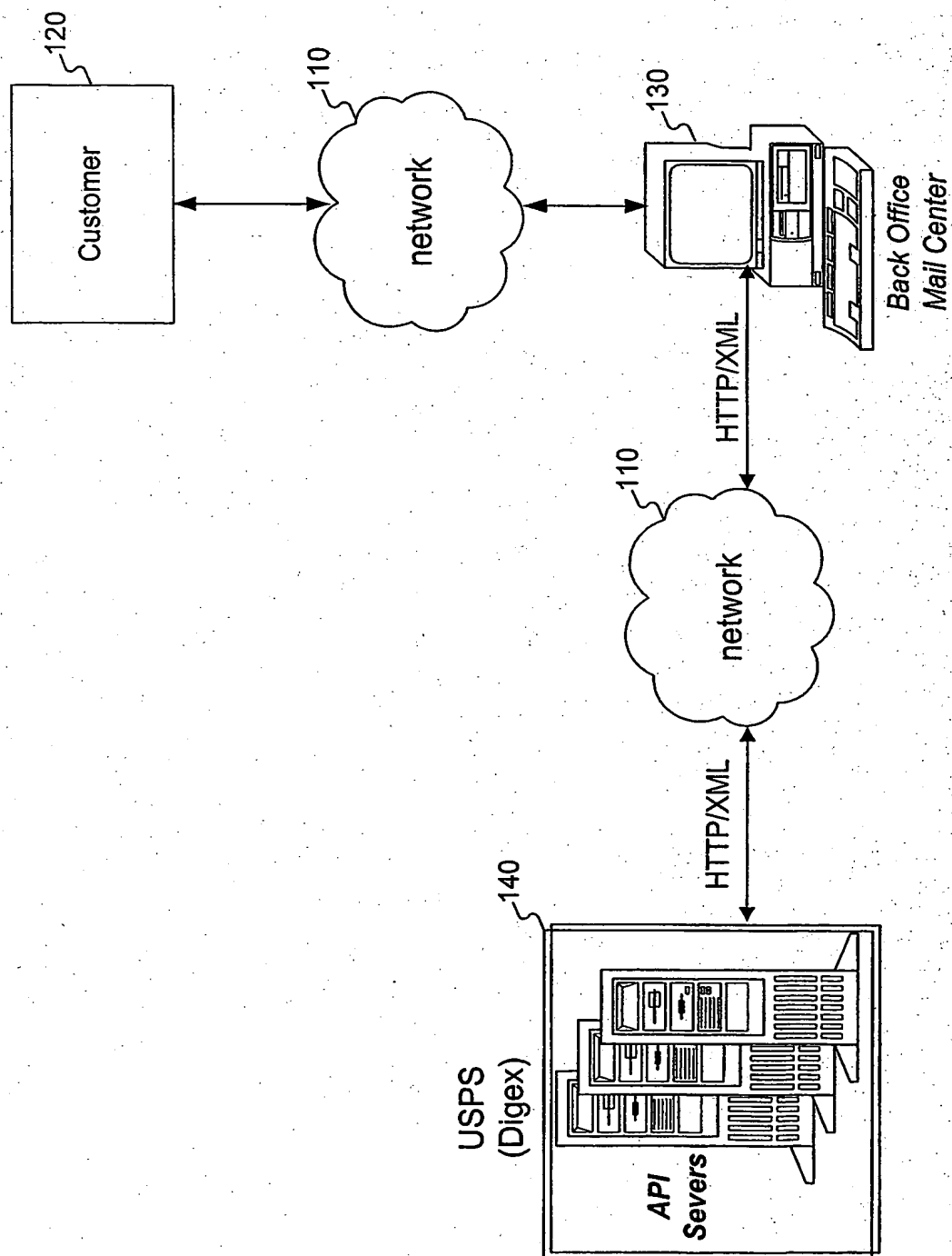
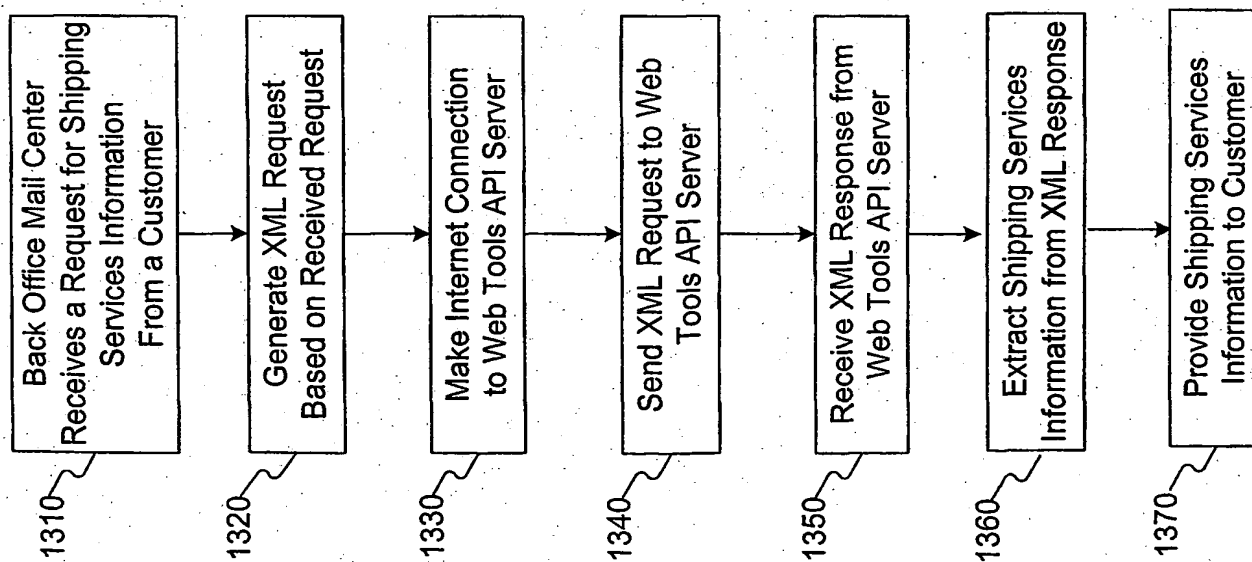


Fig. 22

Fig. 23



# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/27535

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>																										
IPC(7) : G06F 17/60 US CL : 705/410																										
According to International Patent Classification (IPC) or to both national classification and IPC																										
<b>B. FIELDS SEARCHED</b>																										
Minimum documentation searched (classification system followed by classification symbols) U.S. : 705/410, 1, 402, 406																										
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																										
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)																										
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>																										
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																								
A	US 6,047,273 A (VAGHI) 04 April 2000 (04.04.2000), See entire document	1-28																								
A	US 6,064,981 A (BARNI et al) 16 May 2000 (16.05.2000), See entire document	1-28																								
A	US 5,341,505 A (WHITEHOUSE) 23 August 1994 (23.08.1994), See entire document	1-28																								
A,P	US 6,233,568 B1 (KARA) 15 May 2001 (15.05.2001), See entire document	1-28																								
A	US 6,078,889 A (BOUCHER et al) 20 June 2000 (20.06.2000), See entire document	1-28																								
A,P	US 6,220,509 B1 (BYFORD) 24 April 2001 (24.04.2001), See entire document	1-28																								
A	US 6,061,667 A (DANFORD-KLEIN et al) 09 May 2000 (09.05.2000), See entire document	1-28																								
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.																										
<table border="0"> <tr> <td colspan="2">* Special categories of cited documents:</td> <td>"T"</td> <td>later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</td> </tr> <tr> <td>"A"</td> <td>document defining the general state of the art which is not considered to be of particular relevance</td> <td>"X"</td> <td>document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</td> </tr> <tr> <td>"E"</td> <td>earlier application or patent published on or after the international filing date</td> <td>"Y"</td> <td>document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</td> </tr> <tr> <td>"L"</td> <td>document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</td> <td>"&amp;"</td> <td>document member of the same patent family</td> </tr> <tr> <td>"O"</td> <td>document referring to an oral disclosure, use, exhibition or other means</td> <td></td> <td></td> </tr> <tr> <td>"P"</td> <td>document published prior to the international filing date but later than the priority date claimed</td> <td></td> <td></td> </tr> </table>			* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention	"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone	"E"	earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family	"O"	document referring to an oral disclosure, use, exhibition or other means			"P"	document published prior to the international filing date but later than the priority date claimed		
* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention																							
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone																							
"E"	earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art																							
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family																							
"O"	document referring to an oral disclosure, use, exhibition or other means																									
"P"	document published prior to the international filing date but later than the priority date claimed																									
Date of the actual completion of the international search 13 December 2001 (13.12.2001)		Date of mailing of the international search report 09 JAN 2002																								
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230		Authorized officer John W Hayes <i>James R. Matthews</i> Telephone No. (703)305-9700																								

Form PCT/ISA/210 (second sheet) (July 1998)